

**BROOKHAVEN**  
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managed by Brookhaven Science Associates  
for the U.S. Department of Energy

Mr. Brian Jankauskas  
New York State Dept. of Environmental Conservation  
Division of Environmental Remediation  
625 Broadway – 12<sup>th</sup> Floor  
New York, New York 12233-7051

SEP 02 2020

Ms. Sharon Hartzell  
Federal Facilities Section  
U.S. EPA – Region II  
290 Broadway – 18<sup>th</sup> Floor  
New York, New York 10007-1866

Dear Mr. Jankauskas and Ms. Hartzell:

**SUBJECT: BROOKHAVEN NATIONAL LABORATORY (BNL) INTERAGENCY  
AGREEMENT (IAG) – MONTHLY REPORT FOR AUGUST 2020**

In accordance with the Interagency Agreement (IAG) for Brookhaven National Laboratory (BNL), enclosed is the Monthly Report for August 2020 covering the Long-term Stewardship (LTS) areas listed below:

- Brookhaven Graphite Research Reactor (BGRR) Surveillance and Maintenance
- High Flux Beam Reactor (HFBR), including the Waste Loading Area (WLA) Surveillance and Maintenance
- Soil and Water Remediation

If you have any questions, please call Gerald Granzen at (631) 344-4089.

Sincerely,

*W.D. Dorsch*

William Dorsch, Manager  
Groundwater Protection Group

Enclosure:

As stated

cc: w/encl.

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File: GWER 17.1.20

**Brookhaven National Laboratory  
Interagency Agreement (IAG) Monthly Report  
August 2020  
Long Term Stewardship (LTS) Activities**

**BROOKHAVEN GRAPHITE RESEARCH REACTOR (BGRR) SURVEILLANCE AND  
MAINTENANCE**

**Current Month Technical Performance Analysis**

***Accomplishments and/or Technical Achievements***

- The annual below ground ducts inspection was held 8/5/20. A malfunctioning water sensor was identified and will require a follow-up entry to replace it. No other significant issues were identified.

***Highlights of any changes to objectives and description of any changes in technical approach***

- None.

***Key Issues***

- None.

**Planned Actions for the Next 90 Days**

- Continue S&M activities.
- Quarterly inspection of the high bay and former offices will be conducted in November.

**HIGH FLUX BEAM REACTOR (HFBR) INCLUDING, STACK, GROUNDS, AND WASTE  
LOADING AREA (WLA) SURVEILLANCE AND MAINTENANCE**

**Current Month Technical Performance Analysis**

***Accomplishments and/or Technical Achievements***

- BSA and BHSO participated in the weekly stack demolition planning teleconferences with the Army Corps of Engineers (USACE) and DOE's Office of Environmental Management (EM).
- NYSDEC/NYSDOH concurred with the responses to comments on the stack demolition Quality Assurance Project Plan (QAPP), Field Sampling Plan, Demolition Plan and Community Air Monitoring Plan (CAMP) 8/4/20.
- DOE-EM submitted the final Stack QAPP, Field Sampling Plan, Demolition Plan, CAMP and Radiation Protection Plan to the regulators 8/26/20.
- A teleconference with the contractor to review the exterior stack abatement phase of the project was held 8/6/20.
- The exterior stack abatement phase of the project began late August.

- DOE-EM briefed the regulators on the status of the stack demolition during the 8/6/20 IAG monthly teleconference.
- Contractor completed the Five Year Review of Radiological Decay for the HFBR 65-Year Safe Storage (Decay) Period based on the radiological survey conducted by BNL Radiological Controls inside the V-14 port of the reactor vessel.
- The stack drain tank water level is maintained below 250 gallons and checked weekly.

***Highlights of any changes to objectives and description of any changes in technical approach***

- None.

***Key Issues***

- DOE-EM submitted a milestone extension request for the stack demolition to the regulators 8/25/20. EPA and NYSDEC provided verbal approval. EPA will follow-up with an approval letter.

**Planned Actions for the Next 90 Days**

- Continue S&M activities.
- The demolition contractor to continue stack exterior coating abatement.
- Quarterly inspection of the confinement dome is scheduled for 10/29/20.

**SOIL AND WATER REMEDIATION**

**Current Month Technical Performance Analysis**

***Accomplishments and/or Technical Achievements:***

- The IAG monthly teleconference was held 8/6/20 and included updates on Building 650 demolition, HFBR stack demolition and Phase 5 PFAS characterization.
- Received NYSDEC/NYSDOH comments on the 2019 Groundwater Status Report 8/24/20. Responses and replacement pages are being prepared.
- Start-up testing was completed for the North Street East ethylene dibromide (EDB) extraction wells and treatment system, including performance testing. The extraction wells and system sampling will be reduced to monthly starting September.
- A North Street East EDB carbon change-out was completed 8/27/20.
- Submitted the updated North Street/North Street East Groundwater Treatment System Operation and Maintenance Manual to the regulators 8/3/20.
- Completed PFAS/1,4-dioxane Phase 4 sampling of all originally planned on-site and off-site monitoring wells and off-site extraction wells. Several additional wells will be sampled in September to fill in data gaps. A summary data report will be prepared.
- Contractor and EPD continued installation of GPP-PFAS Phase 5 temporary wells (Geoprobe) downgradient of the Current and Former Firehouses. To date, 26 temporary wells have been installed.
- Work planning is underway for groundwater characterization activities identified in the 2019 Groundwater Status Report. Well drilling contractor began installing a vertical profile well at the OU VI EDB project.

- The BGRR Sr-90 Groundwater Treatment System and the Building 96 Groundwater Treatment System were restarted following receipt of several components needed for the repair.
- Building 96 treatment system was restarted after being repaired due to an electrical issue.
- The Middle Road/South Boundary/Western South Boundary wet well pump was restarted following repair.
- The OU VI EDB system is shut down due to an electrical storm-related control panel failure. Replacement parts are on order.
- Submitted the first quarter 2020 Groundwater Systems Operations Report to the regulators 8/7/20.
- Responded to EPA request for electronic documents 8/13/20.
- Performed Five Year Review inspections of the on and off-site groundwater treatment systems.
- The Groundwater Protection Group (GPG) reviewed and provided comments on the Building 650 Demolition Field Sampling Plan.

***Highlights of any changes to objectives and description of any changes in technical approach***

- On 8/26/20, New York State formally adopted maximum contaminant levels for PFOS, PFOA and 1,4-dioxane.

***Key Issues***

- The Laboratory continued Phase 2 operations. The GPG maintained minimal staff working on-site to manage field activities. All other GPG staff continue to work remotely.
- Inspection of the PR-WC-06 cleanup area vegetation recovery by the NYSDEC Biologist was performed 8/5/20. NYSDEC will follow-up with a letter.

**Planned Actions for the Next 90 Days**

- The Laboratory and GPG will continue Phase 2 operations.
- The monthly IAG teleconference is scheduled for 9/3/20 and will include updates on Building 650 demolition, HFBR stack demolition, Phase 5 PFAS characterization and the upcoming CAC meeting.
- The CAC meeting is scheduled for 9/10/20 and will include an update on emerging contaminants.
- The Brookhaven Executive Roundtable is scheduled to meet 9/16/20.
- Begin routine operations of the North Street East EDB treatment system.
- Continue installation of Phase 5 PFAS temporary wells downgradient of the Current and Former Firehouses.
- Perform repairs to the roof of the Building 96 Treatment System RTW-1 well-house.
- Perform Five Year Review inspections of former soil cleanup areas.
- BNL Water and Sanitary Team meeting is scheduled for 9/9/20.
- Carbon change-outs at OU VI EDB and Airport Treatment Systems are planned for late September.